

Manufacturing in Virginia

SIC 36 Electrical and Electronic Equipment



707 East Main Street, Suite 300
P.O. Box 446
Richmond, VA 23218-0446
(804) 371-8200
www.dba.state.va.us

For more information contact Jay Ruehrmund at 804.371.0071 or by
email jruehrmund@dba.state.va.us

Overall Assessment

- Reached its highest employment level in Virginia in 1985 — 42,600 jobs; has lost almost 15,000 jobs since then.
- Was Virginia's fastest growing manufacturing industry from 1953 (first year employment data reported in Virginia) to 1969, both in number of jobs and percentage.
- Industry has lost 262,000 jobs nationally since 1969.
- Virginia's second largest exporter of manufactured goods.

Employment

| | Virginia | | U.S. | |
|------|------------|------|------------|------|
| | Employment | Rank | Employment | Rank |
| 1953 | 3,200 | 14 | 1,331,300 | 3 |
| 1969 | 22,800 | 7 | 1,966,000 | 3 |
| 2000 | 27,700 | 6 | 1,704,100 | 3 |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Employment Trends

Absolute Employment Growth

| | Virginia | | U.S. | |
|-----------|----------------------------|------|----------------------------|------|
| | Absolute Employment Change | Rank | Absolute Employment Change | Rank |
| 1953-2000 | +24,500 | 2 | +372,800 | 3 |
| 1953-1969 | +19,600 | 1 | +634,700 | 1 |
| 1969-2000 | +4,900 | 6 | -261,900 | 13 |

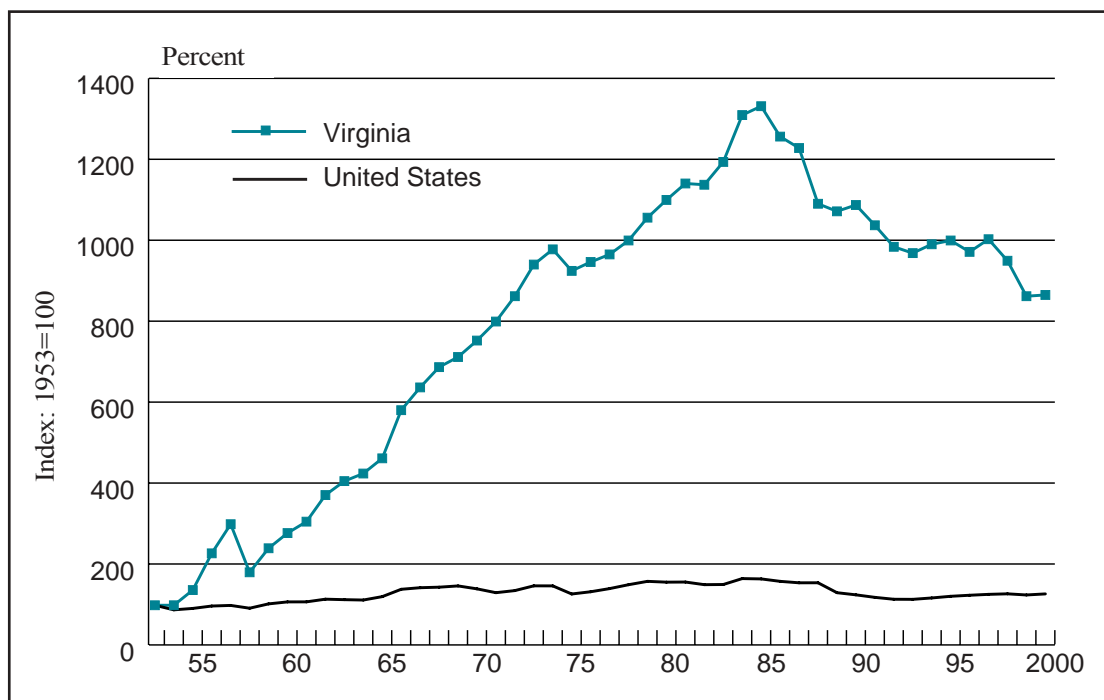
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Relative Employment Growth

| Virginia Annual Average Growth Rates | | | | | | |
|--------------------------------------|-----------------------|------|---------------------|------|-----------------------|------|
| | Growth Rate 1953-2000 | Rank | Growth Rate 1953-69 | Rank | Growth Rate 1969-2000 | Rank |
| Electrical and Electronic Equipment | | | | | | |
| Virginia | 4.7% | 1 | 13.1% | 1 | 0.6% | 7 |
| U.S. | 0.5% | 5 | 2.5% | 1 | -0.5% | 11 |
| Nonagricultural Employment | 2.9% | | 2.9% | | 2.9% | |
| Manufacturing | 0.9% | | 2.3% | | 0.2% | |
| Durable Goods | 1.8% | | 3.3% | | 1.0% | |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Employment Change 1953-2000



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Establishments

Number of Establishments

| | Virginia | | U.S. | |
|--|---------------|------|----------------|------|
| | Establishment | Rank | Establishments | Rank |
| Electrical and Electronic Equipment | 285 | 7 | 20,142 | 7 |
| Manufacturing | 6,908 | -- | 413,506 | -- |
| Electrical and Electronic Equipment as a % of Mfg. | 4.1% | | 4.9% | |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Employment per Establishment

| | Virginia | | U.S. | |
|-------------------------------------|------------|------|------------|------|
| | Employment | Rank | Employment | Rank |
| Electrical and Electronic Equipment | 94 | 10 | 83 | 5 |
| Manufacturing | 57 | -- | 45 | -- |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Payroll

Payroll per Employee

| | Virginia | | U.S. | |
|--|----------------------|------|----------------------|------|
| | Payroll per Employee | Rank | Payroll per Employee | Rank |
| Electrical and Electronic Equipment | \$40,785 | 8 | \$49,620 | 6 |
| Manufacturing | \$35,767 | - - | \$41,941 | - - |
| Electrical and Electronic Equipment as a % of Mfg. | 114.0% | | 118.3% | |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

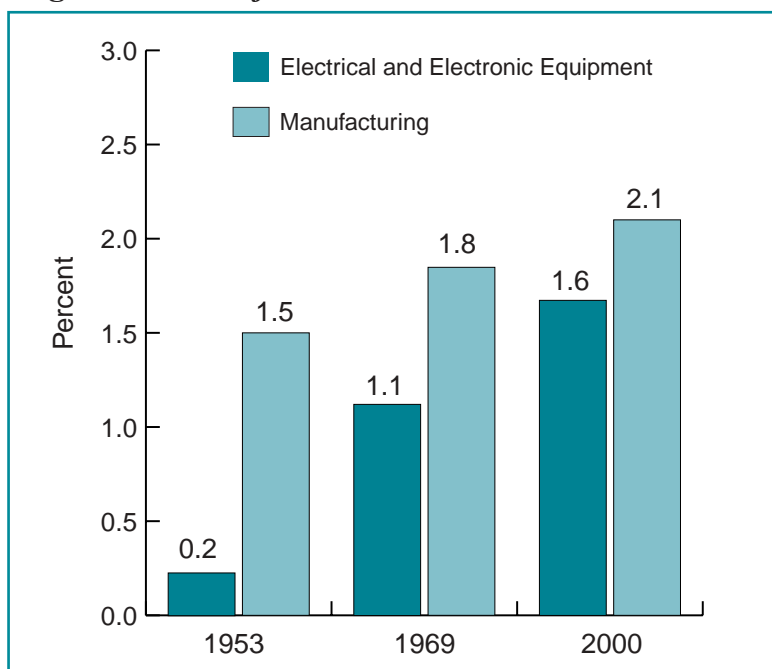
Exports

| Virginia Exports | | |
|---|-------------------------------------|-----------------|
| | Electrical and Electronic Equipment | Manufacturing |
| 2000 | \$1,394,159,000 | \$9,395,636,000 |
| 1995 | \$652,109,000 | \$9,294,115,000 |
| Export Growth, 1995-2000 | 113.8% | 1.1% |
| Share of Manufactured Goods Exports, 2000 | 14.8% | - - |

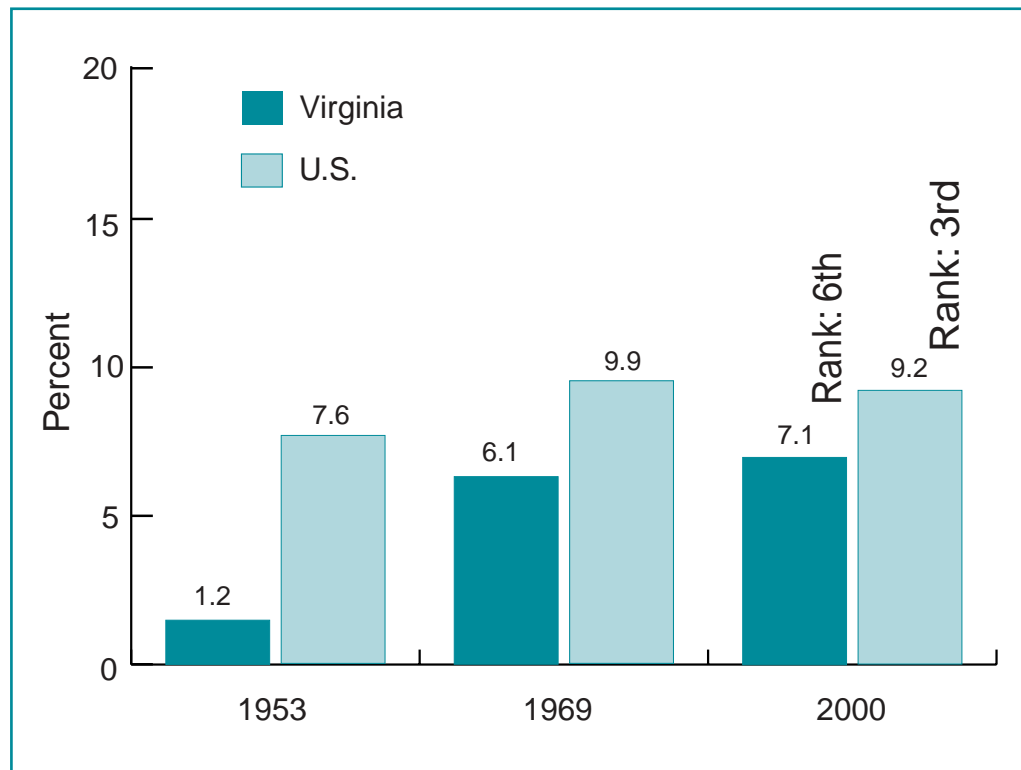
Source: U.S. Department of Commerce.

Industry Importance

Virginia's Share of National Electrical and Electronic Equipment



Source: U.S. Department of Labor, Bureau of Labor Statistics.

Industry's Share of Manufacturing Employment

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Industry Trends

Virginia employment distribution: electronic components and accessories (35 percent), communications equipment (23 percent), electrical industrial apparatus (15 percent), electric lighting and wiring equipment (9 percent), and electric distribution equipment (8 percent).

- Employment in electrical and electronic equipment peaked in 1985. The subsequent decline was primarily due to the effects of foreign competition, especially in communications equipment, and the decline in military procurement expenditures.
- The U.S. telecommunications equipment market is highly competitive and characterized by pressure to improve productivity and reduce costs. In recent years smaller companies have increasingly sought larger partners to gain access to R&D funds and economies of scale.
- Due to foreign competition, most low-end telecommunications equipment is no longer manufactured in the U.S. Imports account for almost 20 percent of apparent domestic consumption of telecommunication equipment.
- Many U.S. semiconductor manufacturers are moving test and assembly facilities to Asia to take advantage of low wage rates. Most of the design and fabrication work remains in the U.S. to take advantage of the highly skilled labor pool of engineers.
- U.S. producers of printed circuit boards face higher manufacturing costs than many overseas companies due to higher labor costs and the cost of complying with environmental, labor, and health regulations.
- Foreign imports account for 36 percent of apparent domestic consumption in the U.S. of electronic components.